NOVA SCOTIA

Canadian Community Health Survey
Summary Report to the District Health Authorities

Published by:
Performance Measurement and Health Informatics
Nova Scotia Department of Health

Published on:
October 17, 2002

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District Health Authorities

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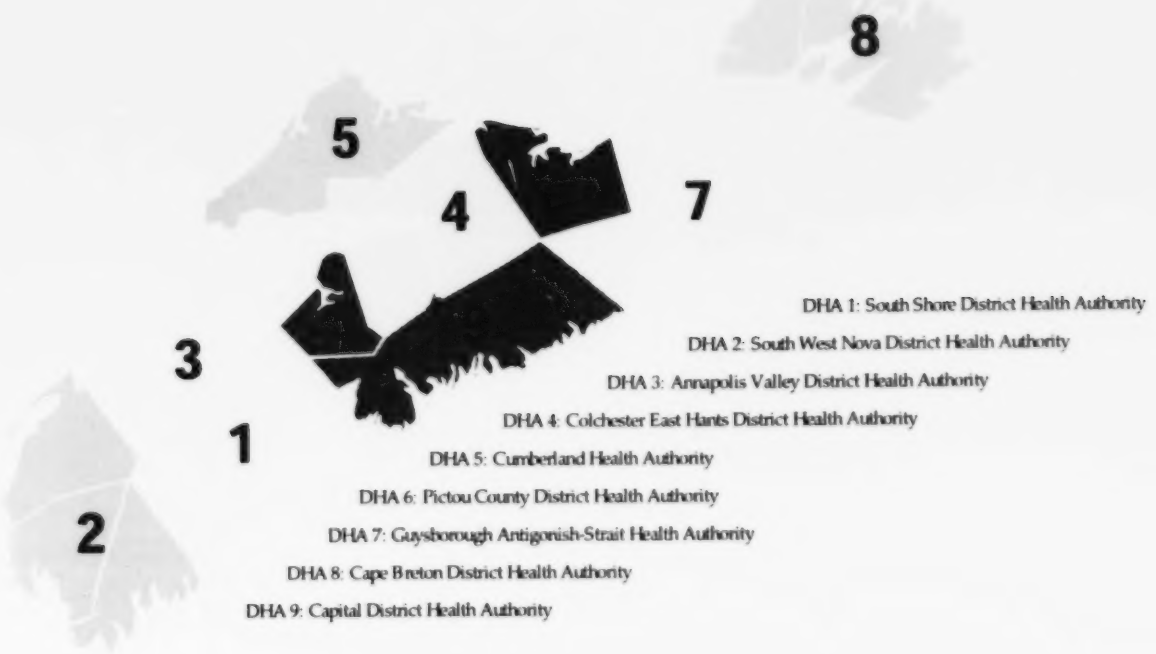
8
5
4
7
3
1
2
DHA 1: South Shore District Health Authority
DHA 2: South West Nova District Health Authority
DHA 3: Annapolis Valley District Health Authority
DHA 4: Colchester East Hants District Health Authority
DHA 5: Cumberland Health Authority
DHA 6: Pictou County District Health Authority
DHA 7: Guysborough Antigonish-Strait Health Authority
DHA 8: Cape Breton District Health Authority
DHA 9: Capital District Health Authority

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Overview of CCHS Cycle 1.1

The Canadian Community Health Survey (CCHS) is a national cross sectional survey on issues of personal health and well-being. The survey is administered by Statistics Canada with the support of Health Canada and the Canadian Institute for Health Information (CIHI). Further, the CCHS allows for input by provinces and health authorities.

Data are collected in a series of two-year cycles; the first cycle data, CCHS Cycle 1.1, were collected in 2000/01 and released in May 2002.

The survey included respondents sampled from all the provinces and the territories, excluding Indian Reserves, Canadian Forces Bases, and a few remote areas.

Survey questions are arranged in modules, which are further organized as core and optional content. The core content questions are asked of respondents nationally in all health authorities.

Health authorities select the optional content questions to be asked in their jurisdictions based on their specific areas of interest. Thus, the optional content varies by province, and in some cases, between health authorities within a province. In order to facilitate intra-provincial comparisons, all health authorities in Nova Scotia selected the same optional content questions for Cycle 1.1. Please see Appendix One for a list of the CCHS Cycle 1.1 core and optional content modules available for Nova Scotia.

Since the CCHS employs a complex sampling design, guides to CCHS sampling and to interpreting the results presented in this paper follow in Appendices Two and Three.

For more information please see the CCHS website at:
http://www.statcan.ca/english/concepts/health/cchsinfo.htm

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Importance of CCHS

The CCHS is the first extensive survey of the health and well being of Canadians to provide data for all variables at the sub-provincial level, i.e. Statistics Canada Health Zone level.

The data can be further manipulated to yield reliable data at the DHA level for most variables, providing decision and policy makers with rich, DHA-specific information.

Provincial health authorities have input into the questions that are asked in the CCHS, providing a unique opportunity for decision and policy makers to tailor the data content to meet their data and information needs.

This report presents DHA-level data on indicators reflective of the determinants of health as presented in *Healthy People, Healthy Communities: Using the Population Health Approach in Nova Scotia*, Summer 2002 (page 2).

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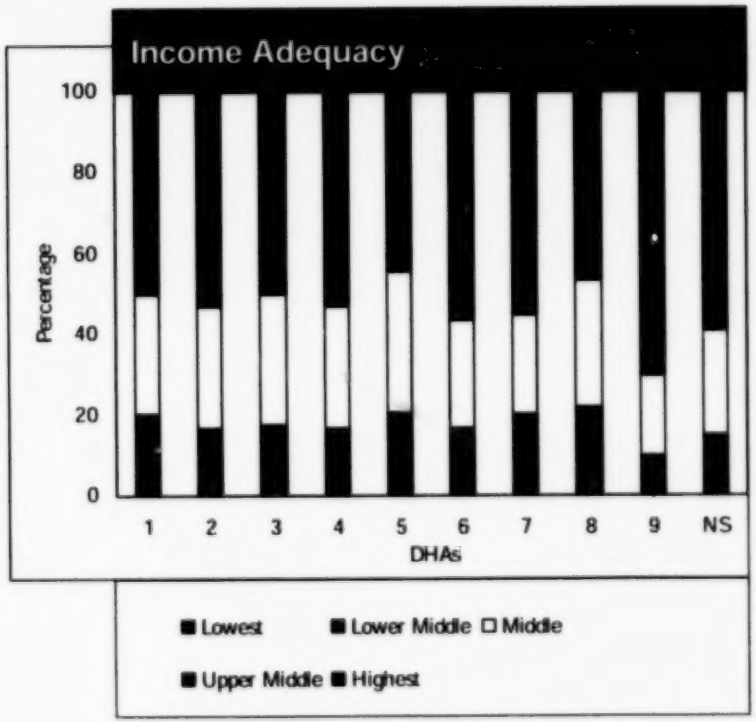
Social & Physical Environments – Income & Social Status

Economic, social, and physical environmental factors play important roles in determining health. The CCHS included many questions on these determinants of health, such as income levels, income adequacy, food insecurity, and exposure to second-hand smoke (environmental tobacco smoke).



Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

Income adequacy is a measure of household income relative to household size.

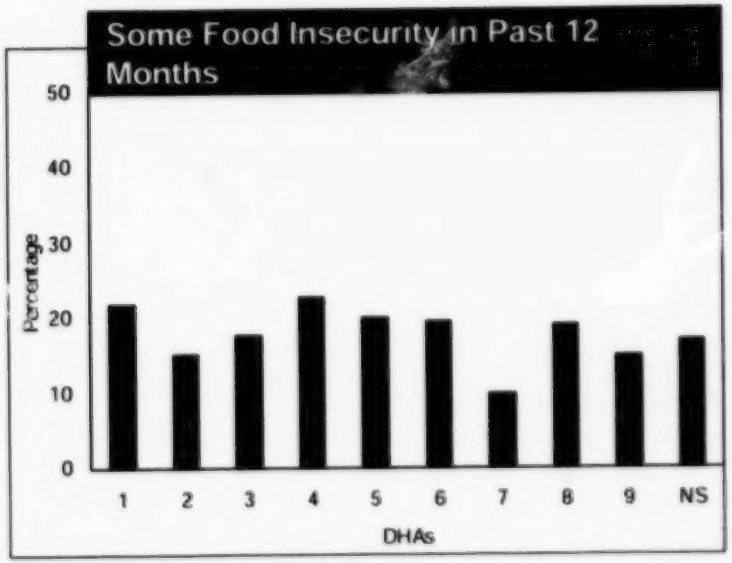
Households in the Lowest category would have the fewest resources to meet their needs whereas those in the Highest would have surplus.

Most people in Nova Scotia were in the Middle category, with DHA 5 having significantly more households in this category.

All areas have about 10 to 20 percent in the Lowest to Lower Middle brackets.

DHAs 2, 3, and 8 had significantly fewer households in the Highest category.

DHA 9 had significantly more households in the Highest category than the rest of Nova Scotia.



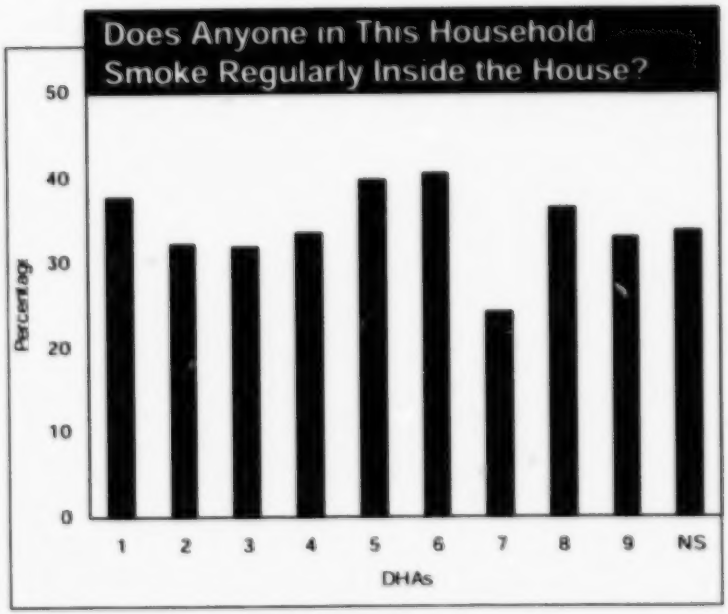
Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

Food insecurity is a composite measure used to assess whether or not Canadians have enough money to eat properly.

It is based on three questions: a. whether you or anyone in your household has worried that there would not be enough to eat; b. whether you or anyone in your household did not have enough to eat; and c. whether you or anyone in your household did not have the desired quality of food to eat due to a lack of money.

This measure indicates that between 10 and 20 percent of all Nova Scotian households reported some concern about having enough money to eat properly.

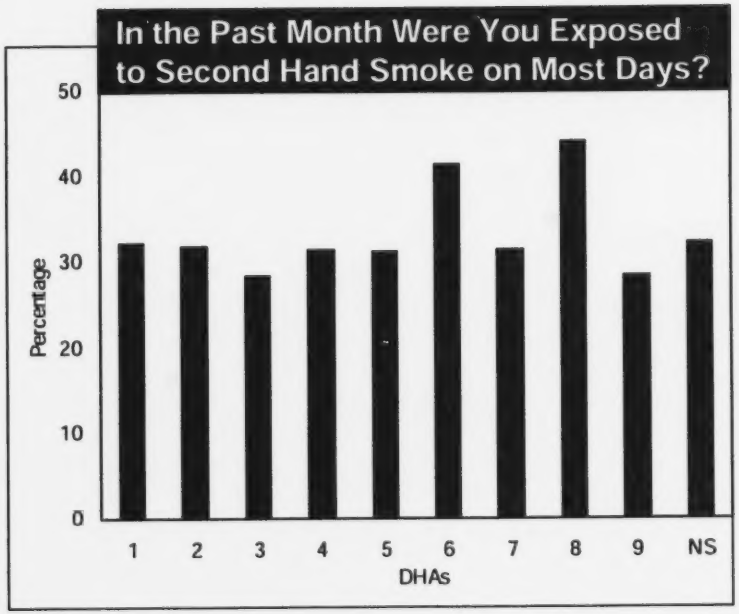
DHA 7 reported significantly less food insecurity than the rest of Nova Scotia.



Between 24 and 41 percent of all households have at least one smoker who smokes inside the house regularly.

No significant differences were reported.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

Roughly 30 percent of all non-smokers reported being exposed to second hand smoke in the previous month.

DHA 8 respondents report significantly more exposure to second hand smoke than Nova Scotia and all but two of the DHAs (DHAs 5 and 6).

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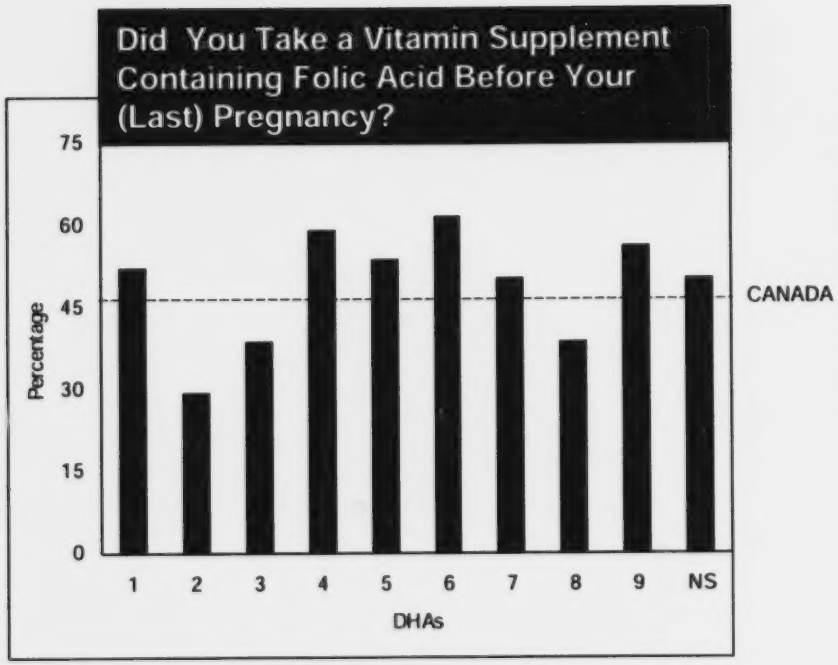
Healthy Childhood Development

Many factors impact on the health of children during the prenatal period, throughout their development, and well into their later life. These factors include such things as the mother's life-style choices, nutrition, and environment. The following section presents CCHS results concerning prenatal health.



Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

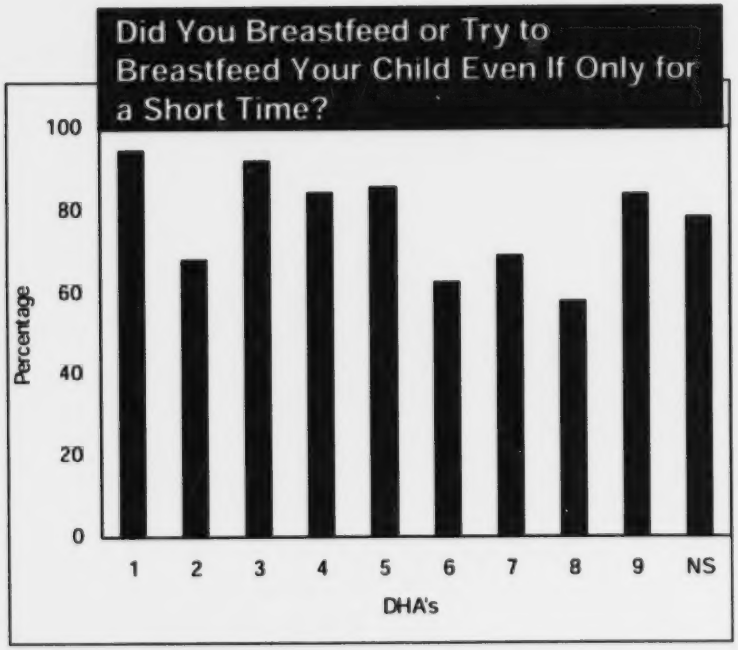
Folic acid has been shown to reduce congenital neurological problems.

Generally speaking, female respondents in Nova Scotia who have given birth in the last 5 years, took folic acid slightly more often than the Canadian rate (50.2% and 47.2% respectively).

No significant differences were reported between DHAs and Nova Scotia results.

This question was asked of women who have given birth in the last 5 years.

The small sample size results in confidence intervals that are large.

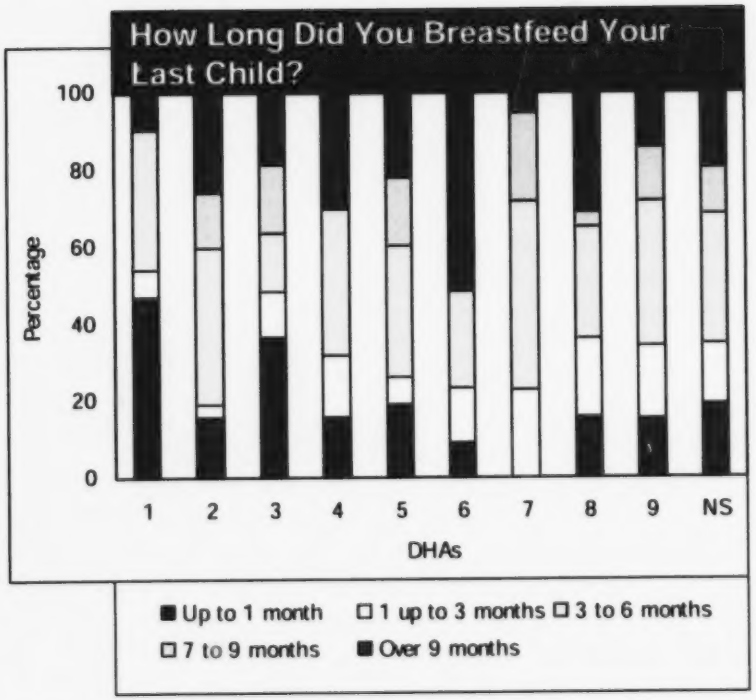


Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

Studies have increasingly shown the benefits of breastfeeding on the health of infants.

Overall, at least half of all female respondents who have given birth in the last 5 years breastfed or tried to breastfeed.

Despite the apparent variation between DHAs only two significant differences were reported between respondents in the DHAs and Nova Scotia: significantly fewer women in DHA 8 breastfed than did so provincially, whereas significantly more women in DHA 1 breastfed than did so provincially.

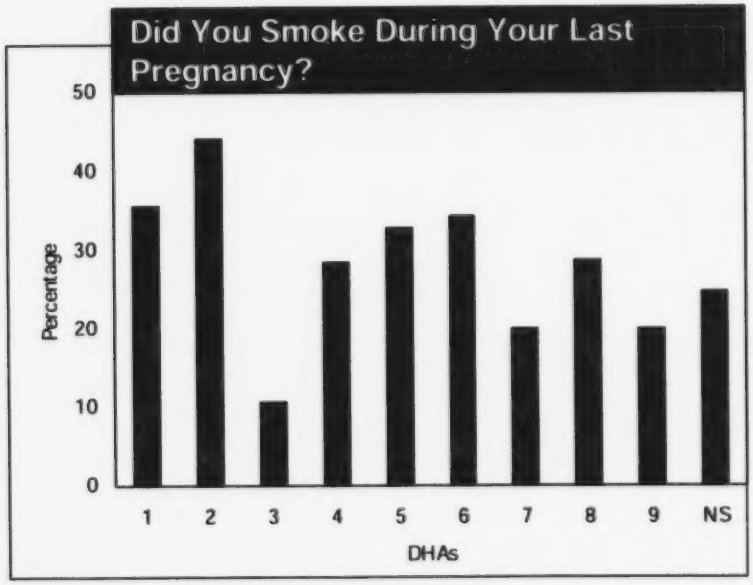


Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

The duration of breastfeeding in Nova Scotia varied widely for female respondents who have given birth in the last 5 years and who are not currently breastfeeding .

Quite a few women in Nova Scotia breastfed for more than 9 months (19.4%).

Significant differences were identified only in DHAs whose respondents reported no breastfeeding in a specific time category: respondents in DHAs 1, 4, and 6 did not report breastfeeding in the '7 to 9 month' category and DHA 7 women did not report breastfeeding in the 'up to one month' category.

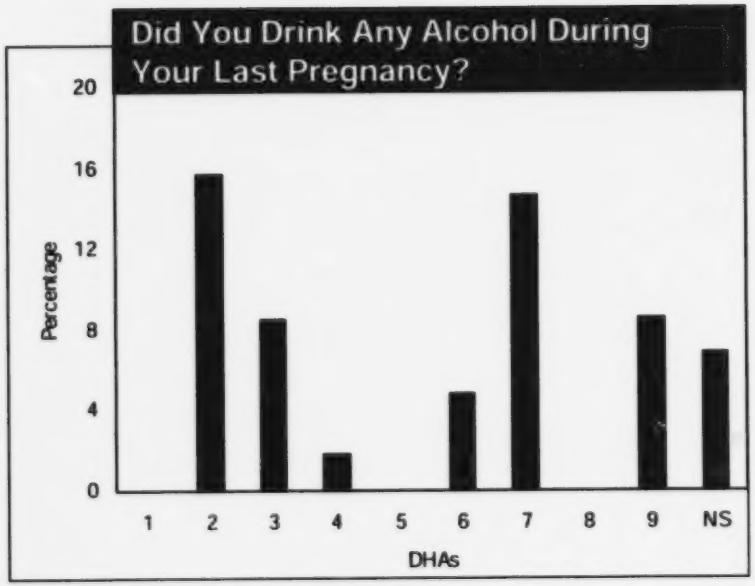


Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

Research has shown that smoking during pregnancy can lead to health problems for the infant including low birth weight.

The results are for women who have given birth in the last 5 years and who have smoked at least one cigarette in their lifetime.

Although the rates reported by the districts varied from 10 to 45 percent, no significant differences were reported.



Drinking alcohol during pregnancy can lead to health problems for the infant including Fetal Alcohol Effects (FAE) and Fetal Alcohol Syndrome (FAS).

The results are for women who have given birth in the last 5 years and who have had at least one drink of alcohol during their lifetime

Less than 16 percent of female respondents drank during their pregnancy.

Although the results varied widely, the only significant results were for those DHAs whose respondents reported not drinking at all (1, 5, and 8) during their last pregnancy.

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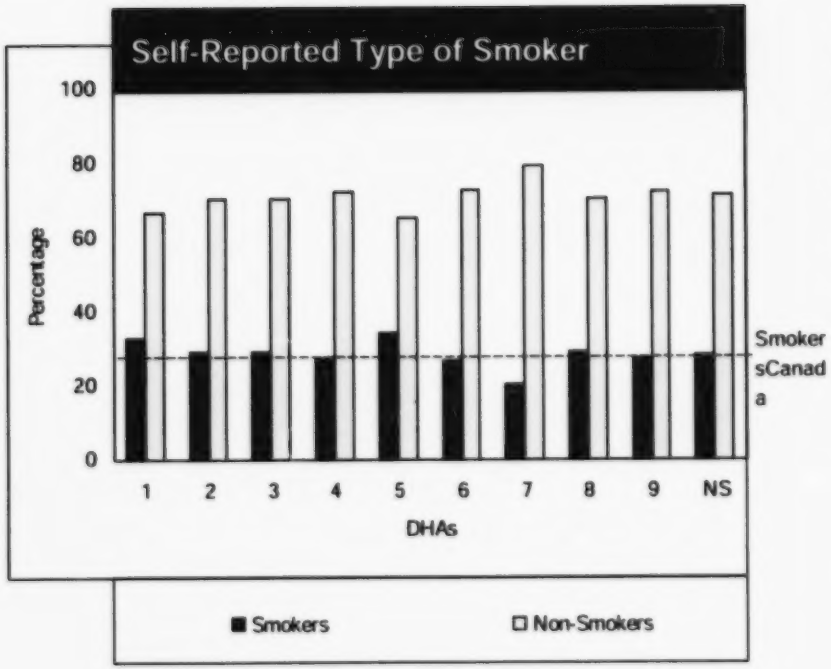
Personal Health Practices

The CCHS provides a wealth of data on personal health practices. These health practices are a potential avenue for health improvement that is within the control of the individual. For instance, when smokers quit smoking, they potentially improve their health and life-expectancy. Also, health service providers can target educational materials to specific 'unhealthy' practices and populations and thereby encourage change.



Smoking has repeatedly been shown to cause detrimental health effects for the smoker and those around them.

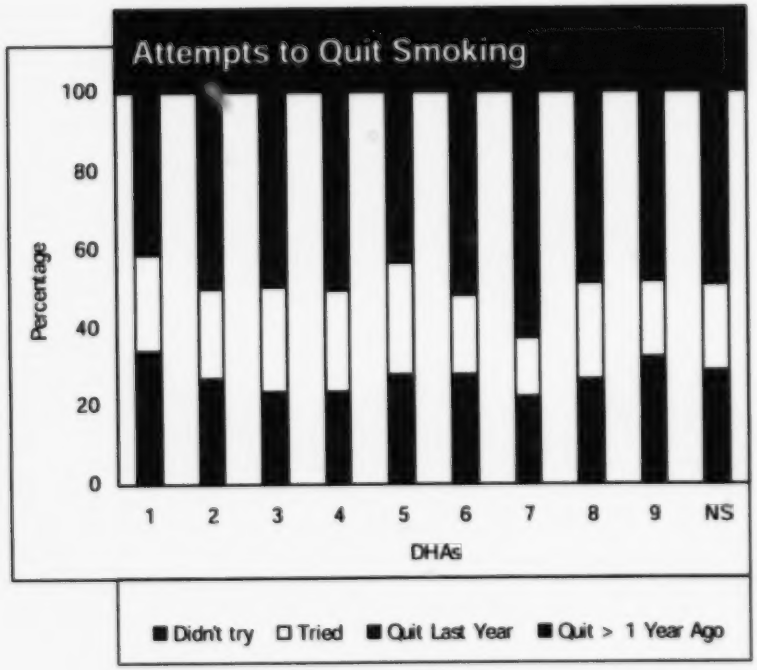
This measure reports daily smokers and occasional smokers as 'smokers' and those who either quit or never smoked as 'non-smokers'.

Overall, about 30 percent of Nova Scotians smoke.

Nova Scotia has significantly more smokers than Canada (28.2% and 26.0% respectively).

There were no significant differences within Nova Scotia.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



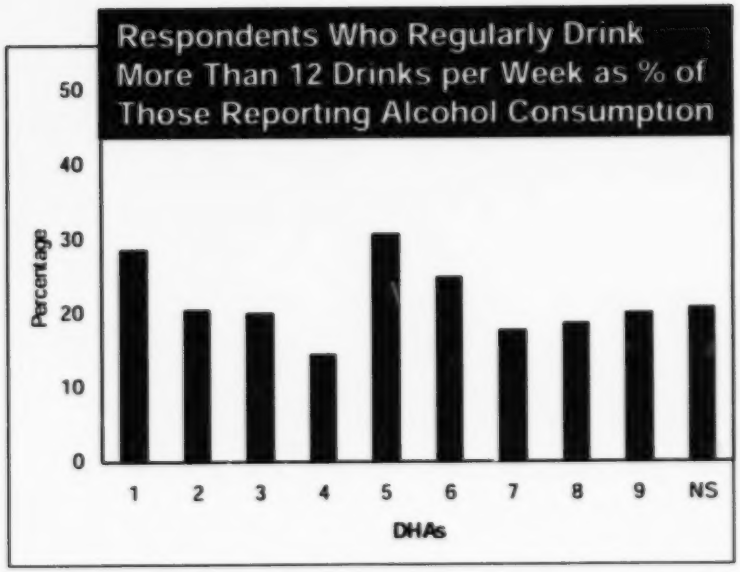
In Nova Scotia many respondents who smoked (at least one cigarette during their lifetime) and answered CCHS questions on smoking cessation aids, have tried to quit (> 60 percent).

However, more than 20 percent of smokers in all areas have made no attempt to quit.

Statistically significant results were reported only in the 'quit last year' category (DHA 1 - smallest percentage of respondents) and in the 'quit more than a year ago' category (DHA 7 – largest percentage of respondents)

Please note that this measure can include current smokers.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

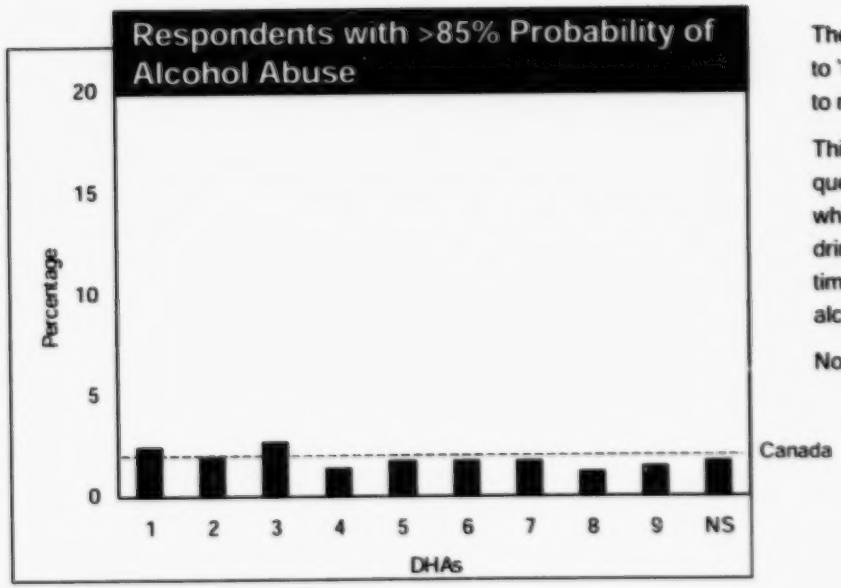


Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

Roughly 20 percent of the people who had a drink in their lifetime, regularly drank 12 or more drinks per week.

No statistical differences were reported.

The question did not ask when or how in the last week the drinks were consumed, i.e., whether at one sitting or during the week.

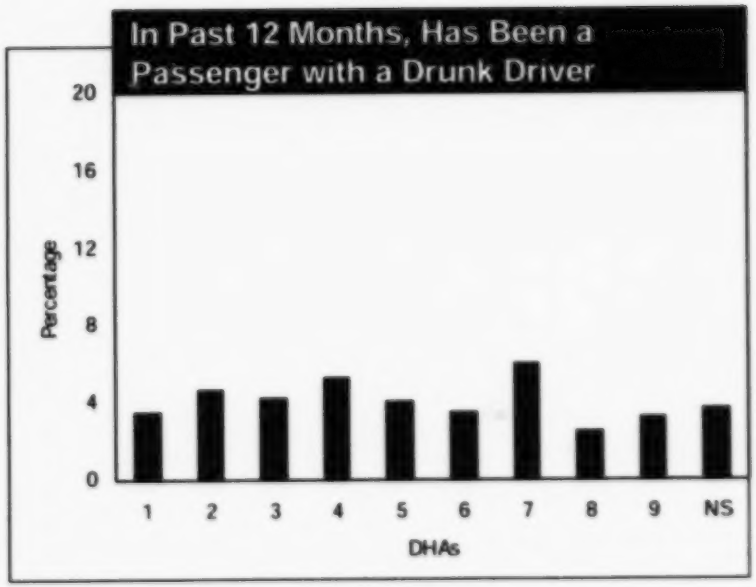


The 'probability of alcohol abuse' measure attempts to 'diagnose' or assign a probability of alcohol abuse to respondents.

This score is calculated from individual responses to questions regarding drunkenness at work, school, or while providing childcare; dangerous situations due to drinking; problems due to drinking; urges to drink; time spent drunk; drinking too much; and tolerance to alcohol.

No significant differences were reported.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

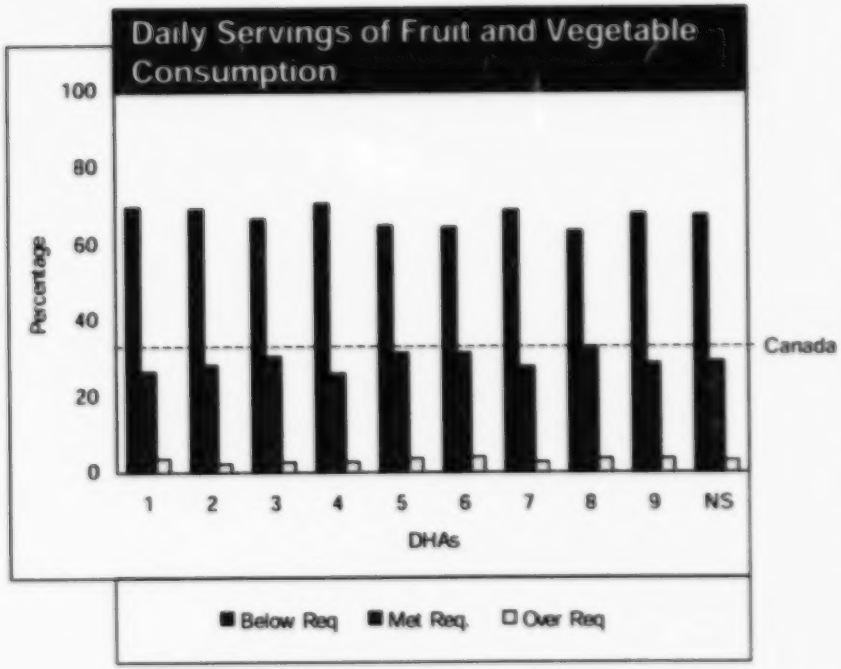


Respondents were asked whether they had been a passenger with an impaired driver; their responses suggest an approximate estimate of the frequency of driving under the influence of alcohol.

Approximately 4 percent of respondents reported driving with a drunk driver.

No significant differences were reported.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



The Canada Food Guide recommends that we consume 5 to 10 servings of fruits and vegetables per day.

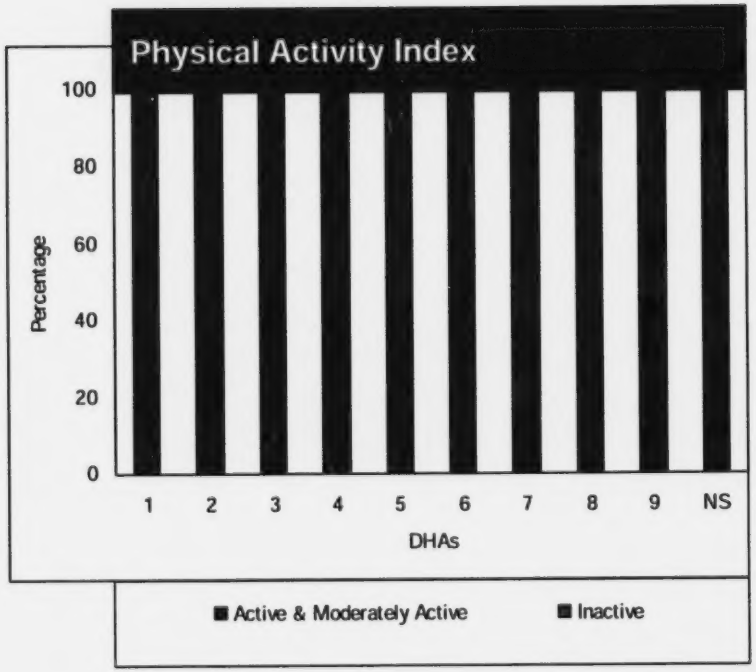
The CCHS fruit and vegetable consumption measure is calculated from responses to questions on the number of daily servings of fruit juice, fruit, green salad, potatoes, carrots, and other vegetables.

Those listed as 'below requirement' consumed fewer than 5 fruit and vegetable servings per day.

Those 'over requirement' consumed over 10 servings of fruit and vegetables per day

The Nova Scotian rate of intake of fruits and vegetables is significantly lower than the Canadian rate, (29.4% and 33.7% respectively).

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



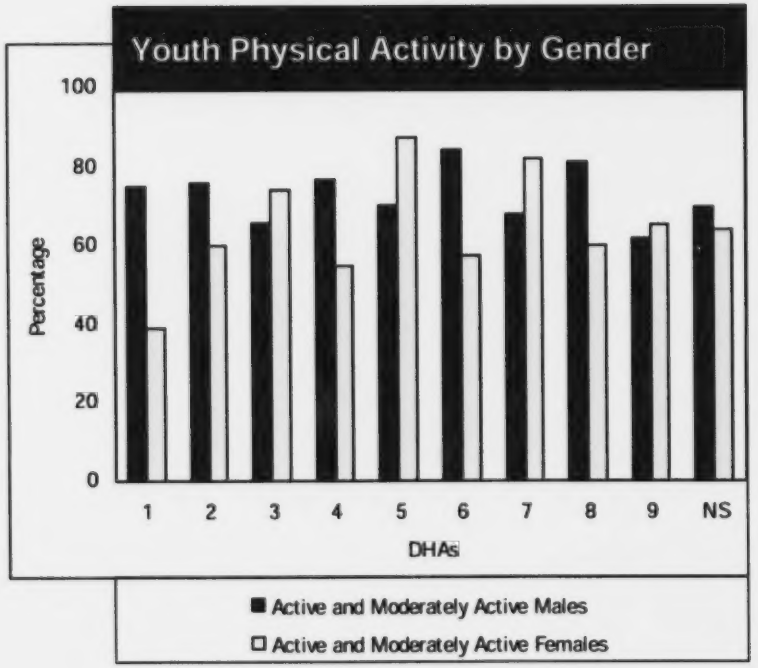
Regular exercise is vital to an individual's health.

At least 40 percent of Nova Scotians reported being regularly active or moderately active.

Compared to Nova Scotia, significantly fewer respondents in DHA 1 reported being 'active or moderately active'.

Differences between the rates of other DHAs and that of Nova Scotia were not significant.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



Youth 12 to 19 in Nova Scotia, as a whole, are quite active.

However, despite the apparent variation by gender and DHA, the only statistically significant difference is the percentage of 'active and moderately active' young women in DHA 5 which is higher than the rest of Nova Scotia.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

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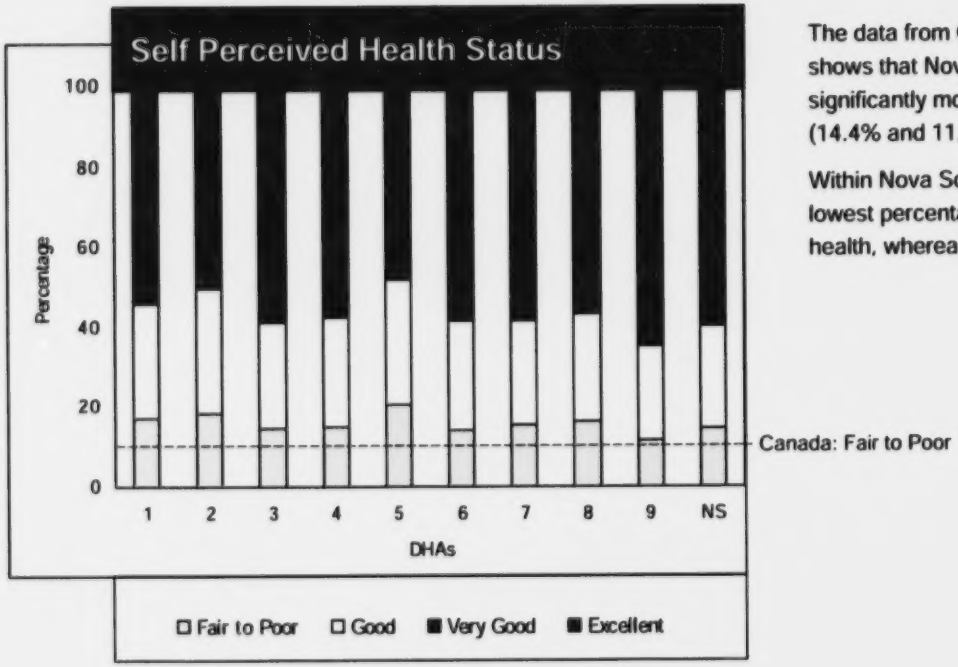
Individual Capacity & Coping Skills

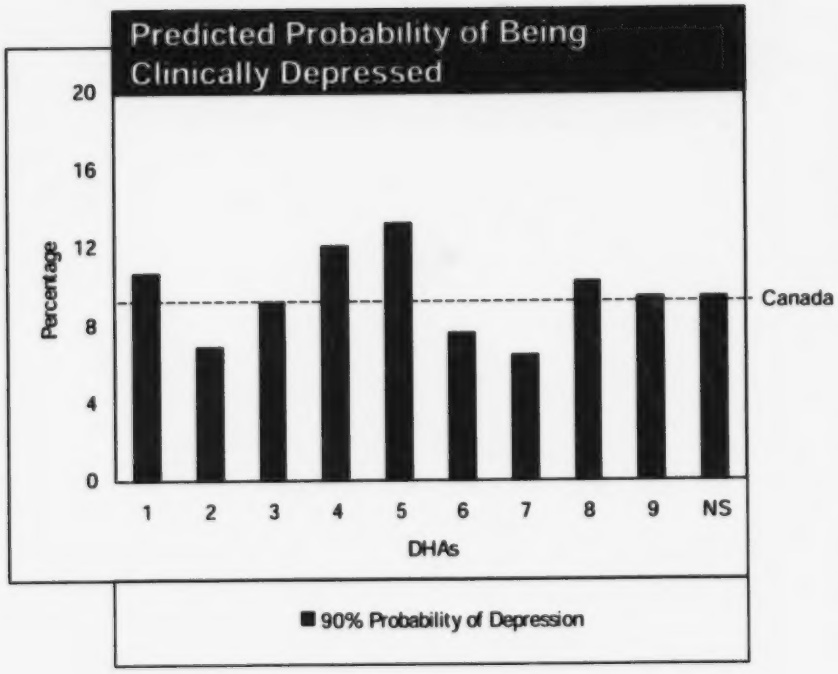
If personal health practices represent that which can be changed and improved, then individual capacity and coping skills represent the 'enablers' of change. These health determinants provide a glimpse into the 'state of mind' of the population.



The data from CCHS re-affirm other research that shows that Nova Scotians report fair or poor health significantly more often than the rest of Canada (14.4% and 11.9% respectively).

Within Nova Scotia, DHA 2 has statistically the lowest percentage of people reporting excellent health, whereas DHA 9 has the highest.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



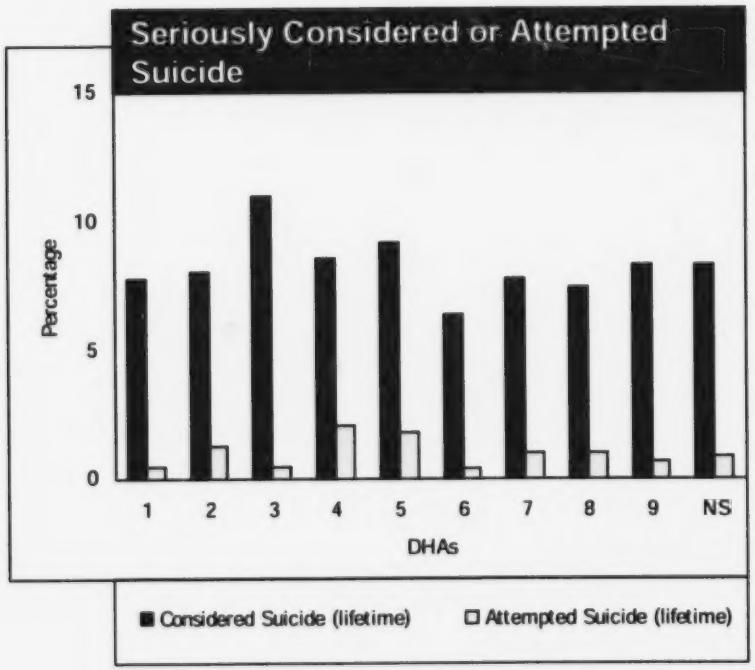
The 'predicted probability of depression' score is calculated from responses to a series of questions, which were designed to 'diagnose' clinical depression (based on the Diagnostic and Statistical Manual of Mental Disorders, 3rd. Edition) .

The results show the percentage of the population in each district who have a 90% probability of being depressed.

Statistics Canada recently reported (*The Health of Canada's Communities*, 2002) that Health Zone 3 (DHA 4 and 5) has, significantly, the second highest depression rate in the country, however, no statistically significant differences were reported at the DHA level here, nor between Nova Scotia and Canada.

This maybe due to small sample size, however, more investigation will be required to account for the reported discrepancy.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



Between 5 and 10 percent of all respondents have seriously considered suicide, while less than 2 percent of all respondents attempted to do so.

No statistical differences were reported.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

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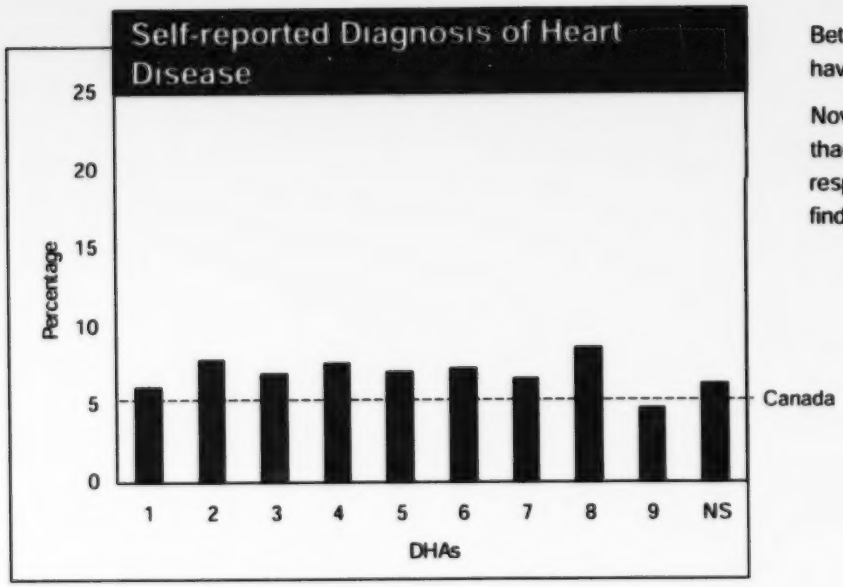
Current Health Status

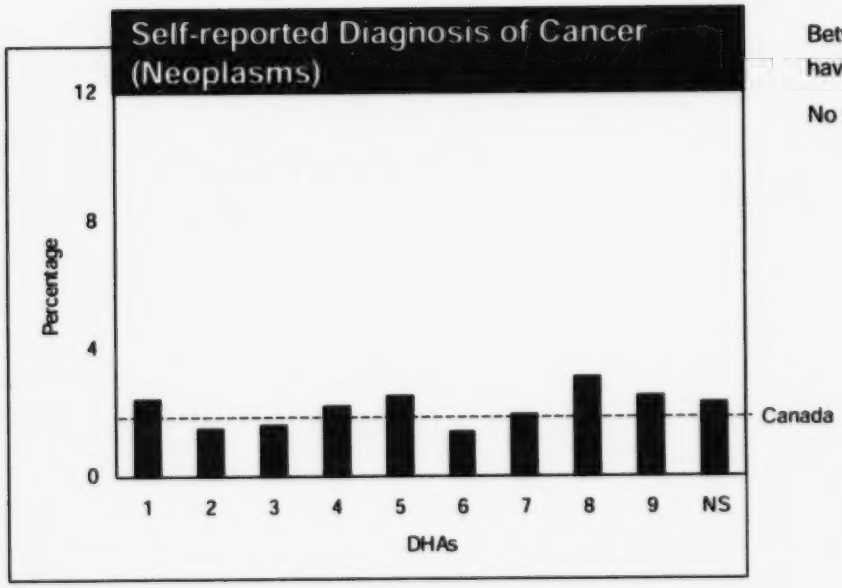
Current health status provides an overall 'snapshot' of the health of a population. Current health status measures include chronic conditions, Body Mass Index (BMI), and self-reported weight.



Between 5 and 9 percent of Nova Scotians report having been diagnosed with heart disease.

Nova Scotians report a higher rate of heart disease than the rest of Canada (6.3% and 5.0% respectively). *This is the only statistically significant* finding in the data as reported.

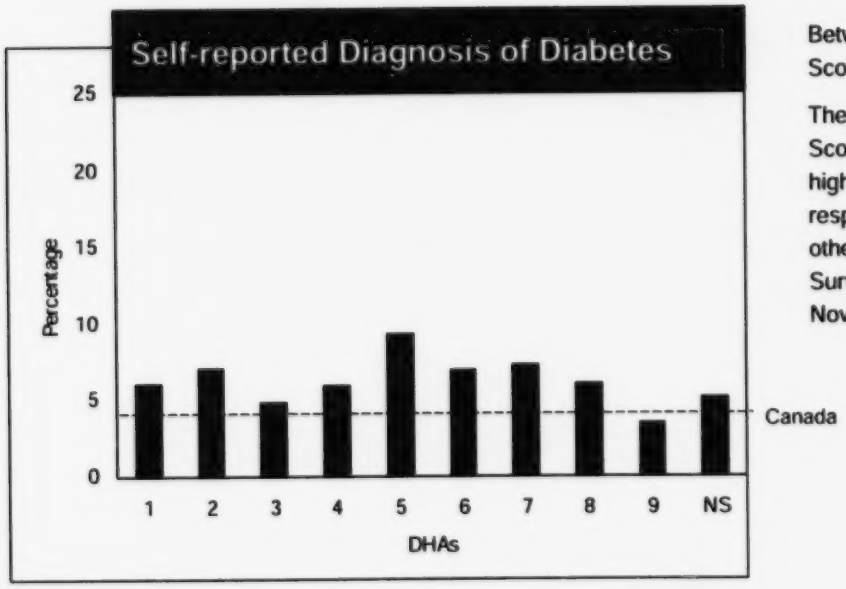
Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



Between 1 and 3 percent of Nova Scotians report having cancer.

No statistically significant differences were reported.

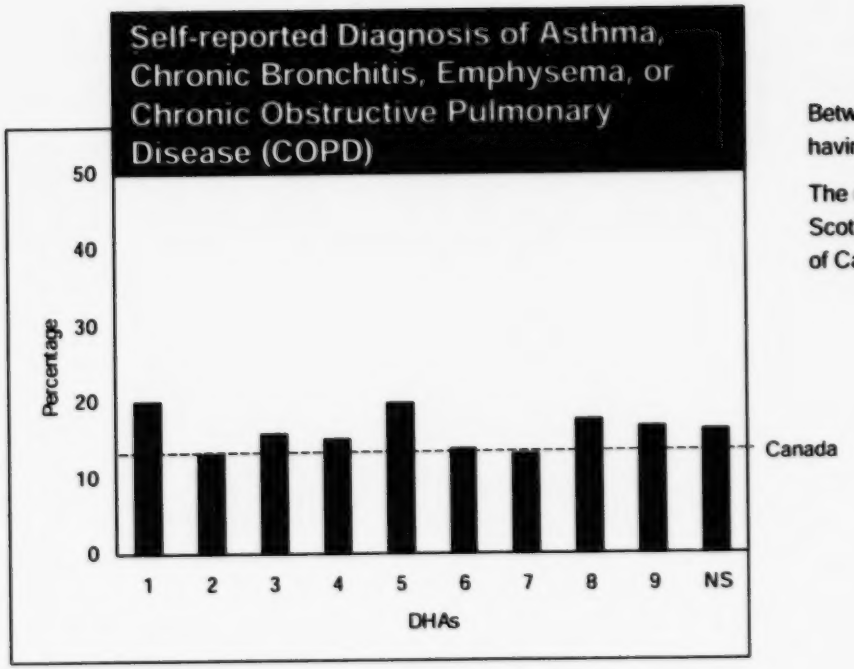
Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



Between approximately 4 and 9 percent of Nova Scotians reported having diabetes.

The only significant difference is between Nova Scotia and Canada with Nova Scotians reporting higher rates of diabetes (5.2% and 4.2% respectively). This finding supports results from other sources, such as National Population Health Survey (NPHS) and the Diabetes Care Program of Nova Scotia.

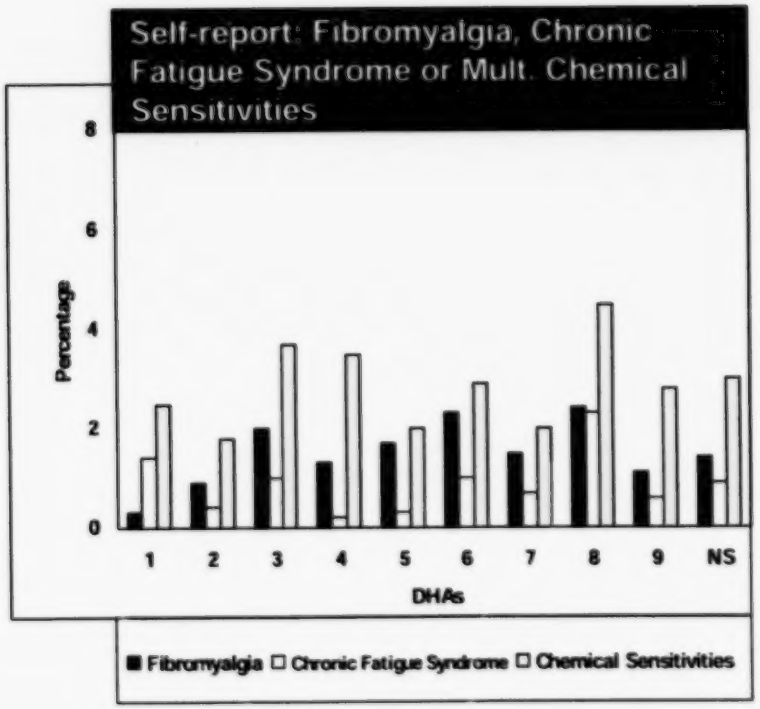
Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



Between 13 and 20 percent of Nova Scotians report having a chronic respiratory disease.

The only significantly different finding is that Nova Scotians report more respiratory illness than the rest of Canada (16.3% and 14.2% respectively).

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

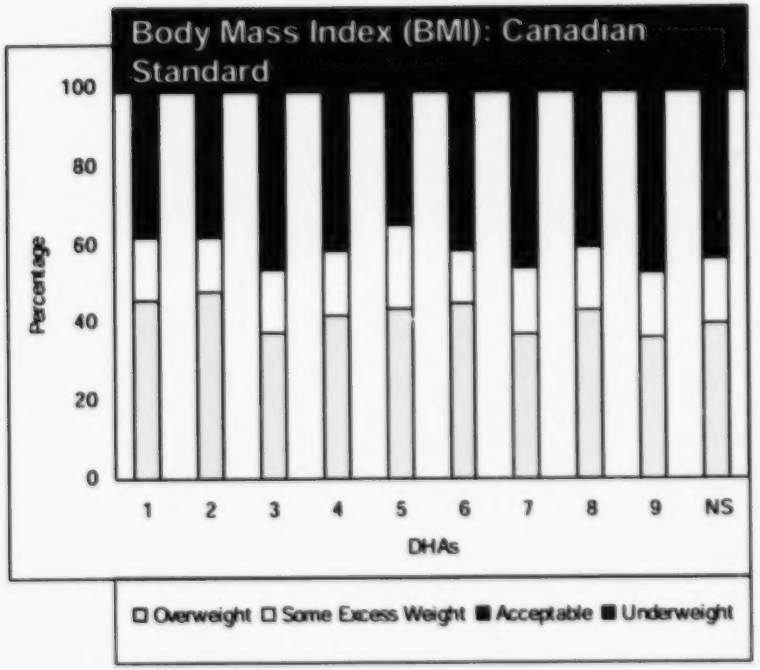


The CCHS provides a unique opportunity to understand self-reported prevalence of some less commonly reported conditions.

Although the percentages are quite small the CCHS has provided a first look at the self-reported prevalence of these conditions at the DHA level.

Respondents in two DHAs report statistically significant results: DHA 1 respondents report a lower rate of fibromyalgia and DHA 4 reports a lower rate of Chronic Fatigue Syndrome sufferers than the rest of Nova Scotia.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

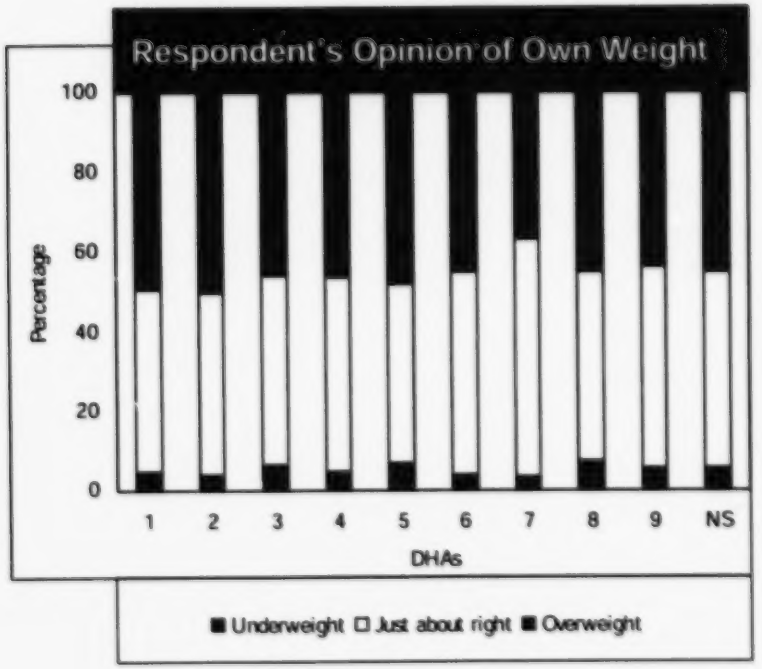


Obesity research has repeatedly demonstrated that obesity leads to poor health outcomes and constitutes a significant health risk.

Between 36 and 48 percent of all Nova Scotian are overweight.

DHA 2 reported the highest (significantly) percentage of overweight people.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

Very few Nova Scotians rate themselves as underweight.

Nova Scotians seem evenly split on rating themselves as being just about right or overweight.

DHA 7 has the statistically smallest percentage of persons who feel that they are overweight in Nova Scotia.

It is interesting that more Nova Scotians feel that they are overweight (45%) than actually are (40% reported on page 36), according to their BMI.

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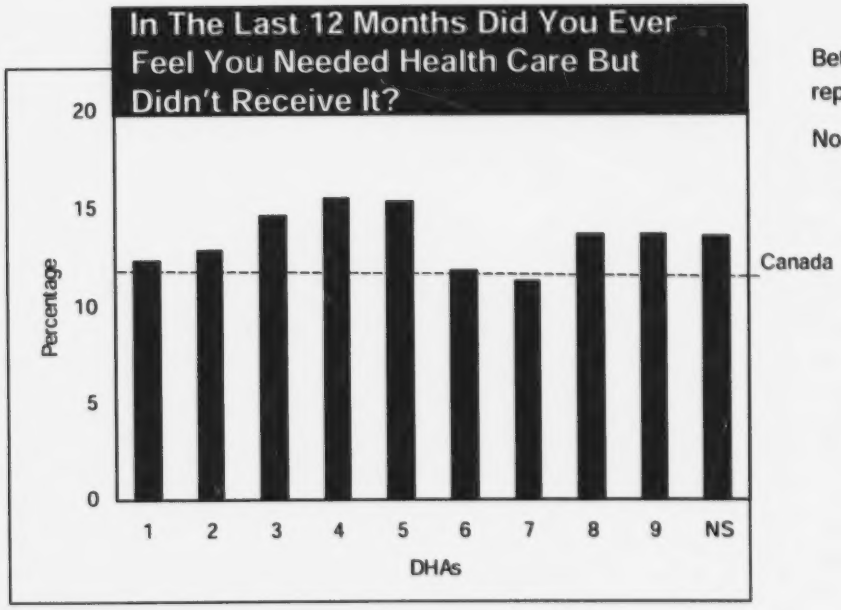
Health Services

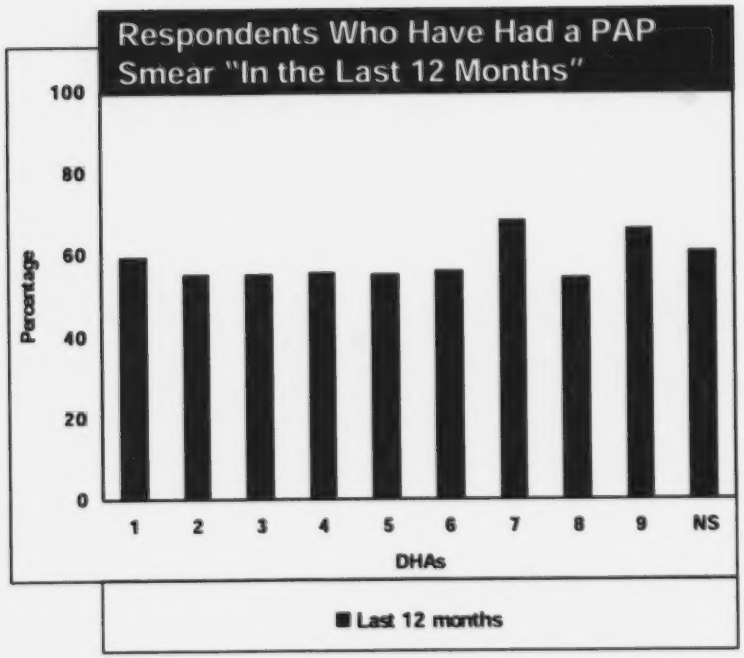
Health services questions can provide insight into health services utilization, perceptions of service adequacy, and service mix. For instance, 19.4 percent of Nova Scotians saw a general or family practitioner in the last 12 months. This rate was significantly lower than that reported in the rest of the country (21.5%).



Between 11 and 16 percent of all Nova Scotians report having unmet health care needs.

No statistically significant differences were reported.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

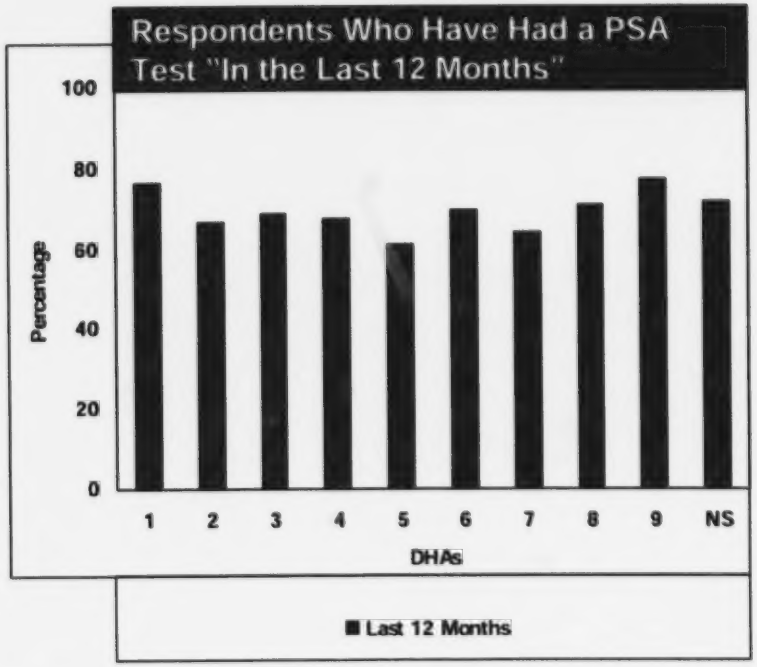


Female respondents who indicated that they had a PAP smear at least once in their lifetime, were further asked "when was the last time you had a PAP smear test?"

Almost all Nova Scotian women (aged 18+) reported having had a PAP smear (90.9%) at some point in their lives. Only about 61 percent of those women report having had a PAP smear in the last year.

No statistically significant differences reported.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

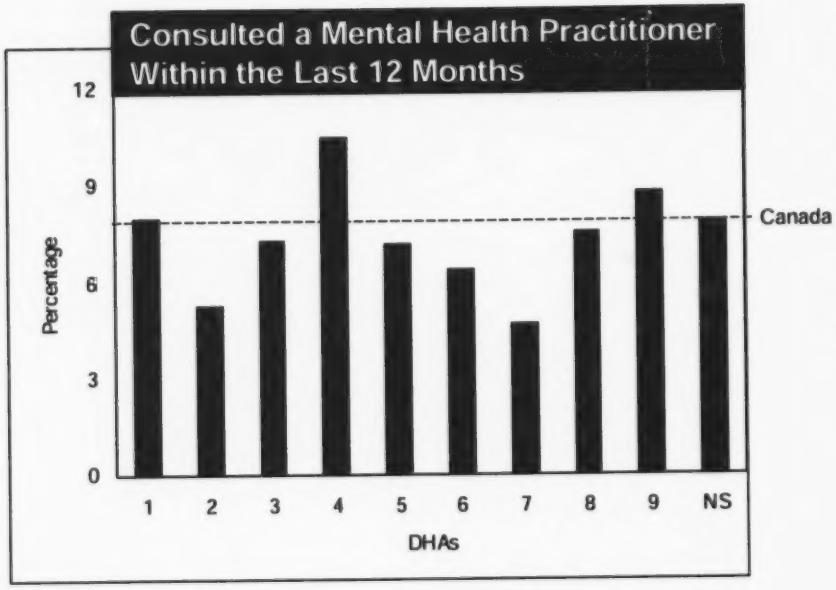


Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

Male respondents who indicated that they had a Prostate Specific Antigen (PSA) blood test at least once in their lifetime, were further asked "when was the last time you had a PSA blood test?"

Less than half of Nova Scotian men (aged 40+) reported having had a PSA blood test (45.9%) at some point in their lives. Yet, 71.7 percent of those men report having had a PSA blood test in the last year.

No statistically significant differences reported.

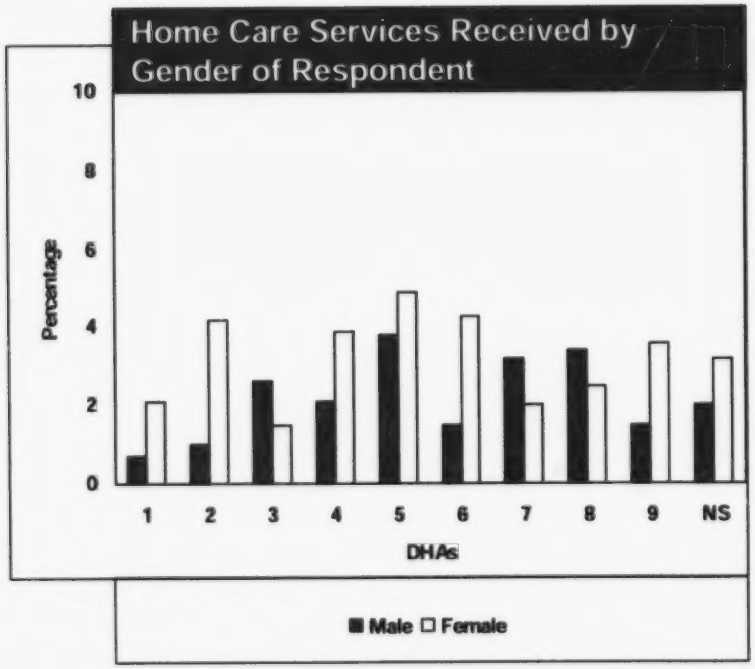


Respondents were asked whether they had consulted a mental health practitioner in the last 12 months.

Approximately 9 percent of Nova Scotians reported that they had consulted a health professional regarding their mental or emotional health in the last 12 months.

Respondents from DHA 7 had, statistically, the lowest percent of contacts with a mental health practitioner (4.7%).

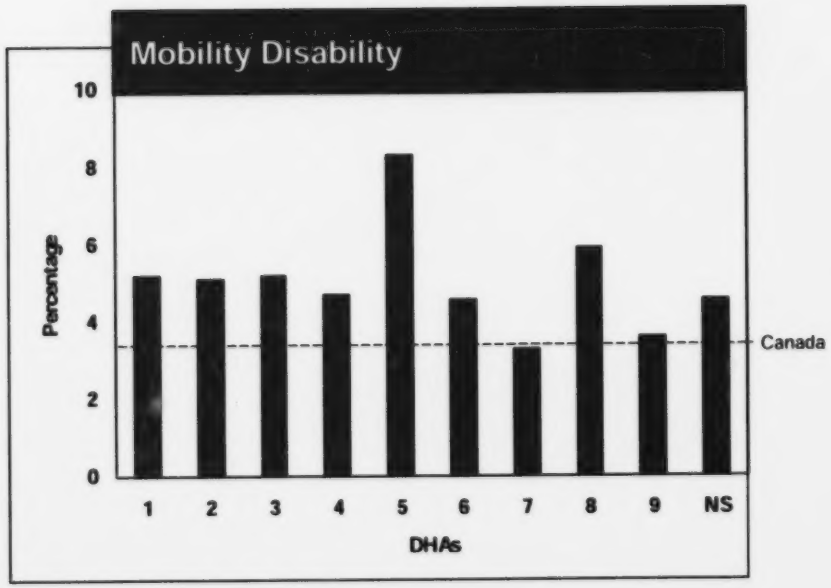
Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada



Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

Respondents to the questions regarding home care were 18 or over.

No statistically significant differences were reported between the rates of home care for men or women, nor for the DHA and Nova Scotia rates.



This measure is based on the Health Utility Index (HUI3).

Respondents were considered to be disabled if they answered 'yes' to questions addressing mobility problems (regardless of whether they corrected those problems with or without the use of walking aids). To be considered disability free, respondents reported no mobility problems.

'Disability' measures can be used as a proxy for health services need.

The only statistically significant finding was between Nova Scotia and Canada – Nova Scotia reporting a higher disability rate than Canada (4.6% and 3.6% respectively). This result has been seen in recent surveys such as the NPHS.

Source: Canadian Community Health Survey (CCHS) Cycle 1.1, Statistics Canada

Appendix One
CCHS 1.1 Modules for Nova Scotia

Health Determinant	*CCHS Module*
Social & Physical Environment	Household Composition
	Food Insecurity
	Socio-Demographic Characteristics
	Exposure to Second Hand Smoke
Education	Socio-Demographic Characteristics (Education)
Income & Social Status	Income
Employment & Working Conditions	Labour Force
Personal Health Practices	Fruit and Vegetable Consumption
	Physical Activities
	Smoking
	Smoking Cessation Aids
	Tobacco Alternatives
	Alcohol Use
	Driving Under Influence
	Alcohol Dependence / Abuse
Individual Capacity & Coping Skills	Self-Perceived Health Status
	Injuries
	Two-Week Disability
	Restriction of Activities
	Work Stress
	Mastery
	Depression
	Suicidal Thoughts and Attempts
Social Support Networks	Social Support (Medical Outcomes Study Questions)

Appendix One - Continued
CCHS 1.1 Modules for Nova Scotia

Genetics	Height / Weight (BMI)
	Chronic Conditions
Gender	Sex
Health Services	Health Care Utilization
	Home Care
	Blood Pressure Check
	PAP Smear Test
	Mammography
	PSA Test
	Contacts with Mental Health Professionals
	Health Utility Index
	Patient Satisfaction
Culture	Socio-Demographic Characteristics (Ethnicity)
Health Child Development	Maternal Experiences

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Appendix Two
Survey Design, Sampling and Bootstrapping

The survey did not employ a simple random sample of Canadians – it employed a more complex cluster sampling design of households and involved respondents aged 12 years plus.

The responses to the survey were distributed by Statistics Canada to the provinces as encrypted raw scores (to roughly 1000 variables) for those respondents who agreed to share their responses with the various health departments (about 95.5% of the total sample).

The data are also provided with three sets of population weights to create point estimates. (Please see the Scores Table for an example of the relationship between raw and weighted scores.)

Once the point estimate is generated, its variance, reflecting the reliability of the estimate, needs to be calculated.

Since the sample design was non-random, a complex method of estimating the variance needs to applied.

Statistics Canada provided a 'bootstrapping method' which calculates the point estimate using 500 different weights; creates a mean value for the point estimate; and then calculates the variance and 95% confidence intervals for that point estimate.

The differences between point estimates, within the same measure, are said to be statistically significant when the confidence intervals do not overlap. For instance, within the measure 'Income Adequacy', if the confidence intervals for the point estimate from DHA 1 and those for the point estimate from Nova Scotia, do not overlap, then the DHA 1 point estimate is statistically different from the Nova Scotia point estimate.

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Appendix Two – Continued
Data, Sampling, and Bootstrapping: Score Tables

DHAs	Sample			Weighted Sample		
	Male	Female	Total	Male	Female	Total
DHA 1	180	169	349	28118	25100	53218
DHA 2	267	319	586	25001	30073	55074
DHA 3	289	396	685	33968	36531	70499
DHA 4	239	298	537	30377	31845	62222
DHA 5	110	142	252	13456	14312	27768
DHA 6	148	197	345	16605	19406	36011
DHA 7	148	173	321	24381	22858	47239
DHA 8	322	458	780	53896	58376	112272
DHA 9	546	749	1295	155041	168629	323670
Nova Scotia	2249	2901	5150	380843	407130	787973

This table compares the number of respondents sampled to their corresponding representative population estimate (weighted sample). For example, 169 women sampled for DHA 1 represent 25,100 women in DHA 1. The magnitude of the differences between those actually sampled and their corresponding population representation, illustrates the need for very accurate variance calculations in order to establish the reliability of the point estimates and thus the necessity of the bootstrapping methodology.

Appendix Three
Guide to Data Interpretation

- The data provided in this report are point estimates with bootstrapping methodology applied to determine statistical significance where necessary.
- Graph titles reflect the actual question from the survey, abbreviated if necessary.
- Statistically significant findings (95% confidence), are discussed in the text section of the report and reflect the differences between the DHAs and Nova Scotia, unless otherwise specified.
- Care must be used in interpreting non-statistically different point estimates.
- The fewer the respondents, the greater the confidence interval around the point estimate.
- All data are presented as percentages.
- For all graphs y-axis label 'percentage' is to be read as 'percentage of the total estimated population', unless otherwise specified in the text